Drug Coverage Decision for B.C. PharmaCare

About PharmaCare B.C. PharmaCare is a government-funded drug plan. It helps British Columbians with the cost of eligible prescription drugs and specific medical supplies.

Details of Drug Reviewed

Drug	**tezepelumab**
Brand Name	Tezspire™
Dosage Form(s)	210 mg/1.91 mL (110 mg/mL) pre-filled syringe 210 mg/1.91 mL (110 mg/mL) pre-filled pen
Manufacturer	AstraZeneca Canada Inc.
Submission Type	**New Submission**
Use Reviewed	As an add-on maintenance treatment in adults and adolescents 12 years and older with severe asthma
Canada's Agency for Drugs and Technologies in Health (CADTH) Reimbursement Reviews (CRR)	Yes, CRR recommended: **to Reimburse with clinical criteria and/or conditions**. Visit the CRR website for more details: www.cadth.ca/node/88649
Drug Benefit Council (DBC)	The DBC met on December 5, 2022, and considered the following: the final reviews completed by the CADTH on December 2, 2022, which included clinical and pharmacoeconomic evidence review material and the CADTH recommendations. The DBC also considered Clinical Practice Review from one general physician, Patient Input Questionnaire response from one Patient Group, as well as patient input provided to CADTH and a Budget Impact Assessment.
Drug Coverage Decision	**Limited Coverage Benefit.** Access the tezepelumab criteria from: **www.gov.bc.ca/pharmacarespecialauthority**
Date	**December 14, 2023**
Reasons	**Drug coverage decision is consistent with the CDEC and DBC recommendations.** • Results from one randomized controlled trial (RCT) demonstrated that tezepelumab added on to standard of care reduced the frequency of asthma attacks compared to placebo in patients with moderate to severe asthma who were on medium- or high-dose inhaled corticosteroids (ICSs) and had 2 or more asthma attacks in the past year.

	• Tezepelumab also met some needs that are important to patients with asthma, such as improving lung function, controlling symptoms, and improving quality of life. • Based on economic considerations and the submitted product price, tezepelumab was not cost-effective and/or offered value for money. • The Ministry participated in the pan-Canadian Pharmaceutical Alliance negotiations with the manufacturer which were able to address the concerns identified by the CADTH with respect to the cost-effectiveness and value for money.
Other Information	None

The Drug Review Process in B.C.

A manufacturer submits a request to the Ministry of Health (Ministry).

An independent group called the Drug Benefit Council (DBC) gives advice to the Ministry. The DBC looks at:

- whether the drug is safe and effective
- advice from a national group called the Canadian Agency for Drugs and Technologies in Health (CADTH) Reimbursement Reviews(CRR)
- what the drug costs and whether it is a good value for the people of B.C.
- ethical considerations involved with covering or not covering the drug
- input from physicians, patients, caregivers, patient groups and drug submission sponsors

The Ministry makes PharmaCare coverage decisions by taking into account:

- the existing PharmaCare policies, programs and resources
- the evidence-informed advice of the DBC
- the drugs already covered by PharmaCare that are used to treat similar medical conditions
- the overall cost of covering the drug

Visit The Drug Review Process in B.C. - Overview and Ministry of Health - PharmaCare for more information.

This document is intended for information only.
It does not take the place of advice from a physician or other qualified health care provider.

Appendix

Drug Benefit Council (DBC) Recommendation and Reasons for Recommendation

FINAL

Tezepelumab (Tezspire™)

AstraZeneca Canada Inc.

Description:

Drug review of **tezepelumab (Tezspire™)** for the following Health Canada approved indications:

As an add-on maintenance treatment in adults and adolescents 12 years and older with severe asthma.

In their review, the DBC considered the following: the final reviews completed by the Canadian Agency for Drugs and Technologies in Health (CADTH) on December 02, 2022, which included clinical and pharmacoeconomic evidence review material and the CADTH recommendations. The DBC also considered Patient Input Questionnaire responses from one Patient Group, as well as patient input provided to CADTH and a Budget Impact Assessment.

Dosage Forms:

Tezspire™ is available as tezepelumab 210 mg single-use, pre-filled syringe and 210 mg single-use, pre-filled pen.

Recommendations:

1. The Drug Benefit Council (DBC) recommends not to list Tezepelumab (Tezspire™) at the submitted price.

Of Note:

- If the Ministry is able to negotiate a price reduction, the reimbursement criteria and conditions recommended by CADTH are an appropriate basis for coverage.

Reasons for the Recommendation:

1. Summary

- Results from one randomized controlled trial (RCT) demonstrated that tezepelumab added on to standard of care reduced the frequency of asthma attacks compared to placebo in patients with moderate to severe asthma who were on medium- or high-dose inhaled corticosteroids (ICSs) and had 2 or more asthma attacks in the past year.
- Tezepelumab also met some other needs that are important to patients with asthma, such as improving lung function, controlling symptoms, and improving quality of life.
- No head-to-head trials have been conducted comparing tezepelumab with other biologics, and its cost-effectiveness relative to other biologics is uncertain given the lack of direct head-to-head evidence and limitations with indirect comparisons.

2. Clinical Efficacy

- The DBC considered the CADTH systematic review, which included three multinational, sponsor-funded, double-blind (DB) RCTs: NAVIGATOR, SOURCE and PATHWAY.
- The NAVIGATOR trial randomized 1,061 patients who were on medium- or high-dose ICSs and who had 2 or more exacerbations in the past year, 1:1, to either tezepelumab or placebo over a treatment course of 52 weeks. The primary outcome was Annualized Asthma Exacerbation Rate (AAER), and key secondary outcomes included the AAER in patients with baseline eosinophils less than 300 cells/µL, change from baseline in pre-bronchodilator expiratory volume in 1 second (FEV_1), Asthma Quality of Life Questionnaire Standardized for Ages 12 and Older (AQLQ[S]12+), and the Asthma Control Questionnaire-6 (ACQ-6).
- The SOURCE trial randomized 150 patients with oral corticosteroid (OCS) dependent asthma, 1:1, to either tezepelumab or placebo over a treatment course of 48 weeks. The primary outcome was the percent reduction in OCS dose while not losing asthma control, and key secondary outcomes included AAER; time to first asthma exacerbation; rate of asthma exacerbation associated with emergency department (ED) visit, urgent care visit, or hospitalization; and patients who did not experience an asthma exacerbation over 48 weeks.
- The PATHWAY trial was a phase II, DB RCT that randomized 550 patients on medium- to high-dose ICSs and at least 2 exacerbations (or 1 severe asthma exacerbation) in the past year, 1:1:1:1, to 3 different doses of tezepelumab (including the proposed dose in the draft product monograph) or placebo, over a treatment course of 52 weeks. CADTH reported only the results from PATHWAY for the tezepelumab treatment group that received the dose recommended in the draft product monograph (210 mg subcutaneous every 4 weeks) and not the other tezepelumab arms. The primary outcome was AAER, and secondary outcomes included subgroups based on the primary outcome, change from baseline in FEV_1, and ACQ-6.

- Evidence from NAVIGATOR demonstrated that tezepelumab was associated with a reduction in asthma exacerbations compared with placebo in patients who were on medium- or high-dose ICSs and had 2 or more exacerbations in the past year. The annualized asthma exacerbation rate (AAER) over 52 weeks was 0.93 with tezepelumab and 2.10 with placebo, for a rate ratio of 0.44. NAVIGATOR also reported tezepelumab improved pulmonary function, health-related quality of life (HRQoL), and symptoms of asthma. The results from NAVIGATOR were supported by similar results from PATHWAY.
- In SOURCE, tezepelumab failed to demonstrate superiority over placebo for the primary outcome, reduction in OCS use.
- No head-to-head trials have been conducted comparing tezepelumab with other biologics. Indirect evidence submitted by the manufacturer suggested that tezepelumab has similar efficacy and harms compared to other biologics used in asthma. However, due to methodological limitations and the degree of heterogeneity between the studies, the indirect evidence comparing tezepelumab to other biologics is uncertain and no firm conclusion could be drawn by CADTH regarding the comparative efficacy and safety of tezepelumab versus other biologics.
- For detailed information on the systematic review of tezepelumab (Tezspire™) please see the CADTH Final Recommendation at: https://www.cadth.ca/tezepelumab.

3. Safety

- Adverse events (AEs) in the tezepelumab versus placebo groups occurred in 77% versus 80% of patients, respectively, in NAVIGATOR; 72% versus 86%, respectively, in SOURCE; and 66% of patients in both groups in PATHWAY.
- The most common AE was nasopharyngitis. Other common events were upper respiratory tract infection, headache, and asthma.
- Serious AEs (SAEs), for tezepelumab versus placebo, occurred in 9% versus 13% of patients in NAVIGATOR. In SOURCE, they occurred in 15% versus 21% of patients, and in PATHWAY they occurred in 10% versus 13% of patients. The most common SAE was asthma.
- AEs resulting in discontinuation of the study drug occurred in 2% versus 4% of patients in NAVIGATOR, 3% in both groups in SOURCE, and 2% versus 1% of patients in PATHWAY, in the tezepelumab versus placebo groups, respectively.
- For detailed information on the safety and tolerability of tezepelumab (Tezspire™), please see the CADTH Final Recommendations at the links above.

4. Economic Considerations

- CADTH noted that cost-effectiveness relative to other biologics is uncertain given the lack of direct head-to-head evidence and limitations with indirect comparisons.
- CADTH calculated the incremental cost-effectiveness ration (ICER) for tezepelumab at $1,334,178 per quality-adjusted life-year (QALY) when compared with standard of care (consisting of high-dose ICSs and a long-acting beta-2 agonist [LABA] alone, and OCSs for OCS-dependent patients).
- A price reduction of 95% would be required for tezepelumab to be able to achieve an ICER of $50,000 per QALY compared to standard of care.

5. Of Note

- Severe asthma is potentially a life-threatening condition, and some patients with the condition may not have adequate response to ICSs or OCSs. Patient input indicated that other asthma medications may be difficult to

administer or may have side effects that are difficult to tolerate, and that other treatment options should be available.

- None of the patients who responded to the survey had experience with tezepelumab.